

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCI United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.ospto.gov

APPLICATION NO.	PLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO 4825	
10/052,293	01/18/2002		Volker Kreidler	1140668-0006		
7470	7590	11/03/2004		EXAMINER		
WHITE & C		· =	BARNES, CRYSTAL J			
PATENT DE		ENT IE AMERICAS	ART UNIT	PAPER NUMBER		
NEW YORK,			2121			

DATE MAILED: 11/03/2004

. Please find below and/or attached an Office communication concerning this application or proceeding.

				/				
	Applica	tion No.	Applicant(s)					
	10/052	293	KREIDLER ET AL.					
Office Action Summary	Examin	er	Art Unit	•				
	Crystal	J. Barnes	2121					
The MAILING DATE of this commu Period for Reply	nication appears on t	he cover sheet with the	e correspondence addres	§\$				
A SHORTENED STATUTORY PERIOD THE MAILING DATE OF THIS COMMUI  - Extensions of time may be available under the provision after SIX (6) MONTHS from the mailing date of this con  - If the period for reply specified above is less than thirty  - If NO period for reply is specified above, the maximum  - Failure to reply within the set or extended period for rep Any reply received by the Office later than three months earned patent term adjustment. See 37 CFR 1.704(b).	NICATION.  ns of 37 CFR 1.136(a). In no numication.  (30) days, a reply within the s statutory period will apply and ly will, by statute, cause the a	event, however, may a reply be tatutory minimum of thirty (30) of will expire SIX (6) MONTHS fro pplication to become ABANDOI	timely filed lays will be considered timely, om the mailing date of this commu NED (35 U.S.C. § 133).	unication.				
Status								
1) Responsive to communication(s) fi	led on 26 August 200	04.						
2a)☐ This action is <b>FINAL</b> .	2b)⊠ This action is							
* *	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims								
4) ⊠ Claim(s) <u>31-93</u> is/are pending in th 4a) Of the above claim(s) <u>51,52,55,</u> 5) □ Claim(s) is/are allowed.  6) ⊠ Claim(s) <u>31,32 and 37-50</u> is/are rej  7) ⊠ Claim(s) <u>33-36,53,54,56,57 and 63,</u> 8) □ Claim(s) are subject to restr	58-62 and 64-93 is/a ected. It is/are objected to.		nsideration.					
Application Papers								
9) ☐ The specification is objected to by to 10) ☑ The drawing(s) filed on 18 January  Applicant may not request that any objected Replacement drawing sheet(s) includired to 11) ☐ The oath or declaration is objected	2002 is/are: a) ☐ acception to the drawing(s) ag the correction is requ	) be held in abeyance. S nired if the drawing(s) is o	ee 37 CFR 1.85(a). objected to. See 37 CFR 1					
Priority under 35 U.S.C. § 119								
12) Acknowledgment is made of a claim a) All b) Some * c) None of:  1. Certified copies of the priority 2. Certified copies of the priority 3. Copies of the certified copies application from the Internati * See the attached detailed Office acti	y documents have be y documents have be s of the priority docur onal Bureau (PCT R	een received. een received in Applica nents have been recei ule 17.2(a)).	ation No ved in this National Staç	ge				
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review ( 3) Information Disclosure Statement(s) (PTO-1449 o				2)				
Paper No(s)/Mail Date		6) Other:	•					

Art Unit: 2121

### DETAILED ACTION

1. The following is a Non-Final Office Action in response to Election

Requirement received on 26 August 2004. Preliminary Amendment received on 18

January 2002 has been entered. Claims 1-30 have been cancelled. Claims 31-93

have been added. Claims 31-93 are now pending in this application.

#### Election/Restrictions

- 2. Applicant's election of claims 31-50, 53, 54, 56, 57 and 63 in the reply filed on 26 August 2004 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
- 3. Claims 51, 52, 55, 58-62 and 64-93 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to nonelected inventions, there being no allowable generic or linking claim. Election was made without traverse in the reply filed on 26 August 2004.

Art Unit: 2121

#### Information Disclosure Statement

4. The examiner is considering the information disclosure statements (IDS) submitted on 07 July 2003, 19 November 2002 and 03 October 2002.

## Drawings

The drawings are objected to because suitable descriptive legends are 5. required for understanding of the drawings. They should contain as few words as possible. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR

Art Unit: 2121

1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

## Claim Objections

- 6. Claims 33 and 34 are objected to because of the following informalities: "which means" in line 3 of the claim should be "said unique identification means".

  Appropriate correction is required.
- 7. Claim 56 is objected to because of the following informalities: claim 56 is a duplicate of claim 54 that incorrectly depends from claim 54. Claim 56 should depend from claim 55. Appropriate correction is required.

# Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 2121

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 31, 37-39 and 43 are rejected under 35 U.S.C. 102(e) as being anticipated by USPN 6,298,308 B1 to Reid et al.

As per claim 31, the Reid et al. reference discloses a system for computer-aided management of a numerically controlled industrial processing machine, the management including transmission of content comprising at least at one of the group consisting of data and services, the system comprising: a host computer (see column 7 lines 35-38, "central monitoring location 34") programmed for producing and providing machine-related content ("analysis software, extensive database"); and a client computer (see columns 5-6 lines 66-5 and 15-20, "OPC clients 24, 28, local experts 16") for controlling at least one aspect (see column 11 lines 15-20, "control of the processes") of the industrial processing machine ("machine 14"), the client computer ("local experts 16") in communication with the host computer (see column 7 lines 48-51, "central monitoring location 34") via a data communication link (see column 7 lines 25-29, "modem 30, DUN, VPN"), the client computer ("local

experts 16") programmed for acquiring machine state data in real time (see column 5 lines 15-20, "continuously able to collect vibration data") and transmitting the machine state data (see column 7 lines 48-56, "vibration data") to the host computer ("central monitoring location 34"), the client computer ("local experts 16") further comprising an analysis and evaluation unit (see column 9 lines 12-15, "expert analyzer module 80") for receiving machine-related content ("analysis software, extensive database") from the host computer ("central monitoring location 34").

As per claim 37, the Reid et al. reference discloses the data communication link (see column 7 lines 25-28, "modem 30, DUN, VPN") between the host computer ("central monitoring location 34") and the client computer ("OPC clients 24, 28, local experts 16") comprising a connection ("modem 30") via a data communication network ("DUN, VPN").

As per claim 38, the Reid et al. reference discloses the data communication network (see column 7 lines 25-28, "DUN, VPN") comprises an Internet ("Internet Virtual Private Network").

As per claim 39, the Reid et al. reference discloses the network (see column 5 lines 42-49, "network 10") comprises an intranet ("system backbone 20").

Art Unit: 2121

As per claim 43, the Reid et al. reference discloses the client computer (see column 7 lines 48-56, "local experts 16") determining machine state data ("vibration data") in response to instructions ("control") received from the host computer ("central monitoring location 34") via the data communications network ("DUN or VPN").

## Claim Rejections - 35 USC § 103

- 10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 11. Claims 32, 40-42 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,298,308 B1 to Reid et al. in view of USPN 6,445,969 B1 to Kenney et al.

As per claim 32, the Reid et al. reference does not expressly disclose the host computer being in communication with a computer system of a manufacturer,

Art Unit: 2121

the host computer comprising system data and being programmed to grant access by the manufacturer computer system to the system data.

The Kenney et al. reference discloses

(see columns 29-30 lines 63-3, "... data related to various process parameters which are measured by sensors coupled to respective process machinery ... store this data in its own database or transmit all or portions of this data to the SPCIS server 803.")

(see column 30 lines 12-18, "... the SPCIS site 801 ... Intranet #1 ... SPCIS server 803 ... LAN interface 805 ... programmable logic controller 807a, 807b ... process machinery 809a, 809b ... desktop system s 811a, 811b ...")

(see column 32 lines 25-31, "Remote users transmit and receive data from the SPCIS server 803 ... two remote users 813 ...")

(see column 32 lines 53-57, "... record of measured process parameters ... be private and accessible only by select personnel or authorized remote users.")

(see columns 32-33 lines 63-1, "... secure transmissions of data ... ISP

Internet SPCIS certificate server 817 ...")

(see column 33 lines 7-10, "... gained access ... obtain information and/or send commands ... in order to obtain specified parameter values.")

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the central monitoring location taught by the Reid et al. reference with the SPCIS network taught by the Kenney et al. reference to include the use of the Internet to connect remote users.

One of ordinary skill in the art would have been motivated to modify the central monitoring location with the SPCIS network to include the use of the Internet to connect authorized remote users to data privately.

As per claim 40, the Reid et al. reference discloses the data communication link (see column 7 lines 25-28, "modem 30, DUN, VPN") between the host computer ("central monitoring location 34") and the client computer ("OPC clients 24, 28, local experts 16") comprising a connection ("modem 30") via a data communication network ("DUN, VPN").

As per claim 41, the Reid et al. reference discloses the data communication network (see column 7 lines 25-28, "DUN, VPN") comprises an Internet ("Internet Virtual Private Network").

As per claim 42, the Reid et al. reference discloses the network (see column 5 lines 42-49, "network 10") comprises an intranet ("system backbone 20").

As per claim 44, the Reid et al. reference discloses the client computer (see column 7 lines 48-56, "local experts 16") determining machine state data ("vibration data") in response to instructions ("control") received from the host computer ("central monitoring location 34") via the data communications network ("DUN or VPN").

12. Claim 45 is rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,298,308 B1 to Reid et al. in view of USPN 5,291,416 to Hutchins.

As per claim 45, the Reid et al. reference does not expressly disclose electronic documents for user selection of options are transmitted from the host computer to the client computer.

The Hutchins reference discloses

(see column 14 lines 7-25, "... machine tool operator downloads a machine tool part program ... interaction with local computer 10 via computer user interface 14 and communication with host computer 20 ... machine tool operator must select the desired machine part from those available at host computer 20 ... Upon selection ... host computer 20 transmits this machine tool part program to local computer 10 via computer network 60 ...")

Art Unit: 2121

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the communication between the central monitoring location and the local experts taught by the Reid et al. reference with the local computer run machine tool program taught by the Hutchins reference to include sending software/programs from the central monitoring location to the local experts.

Page 11

One of ordinary skill in the art would have been motivated to modify the communication between the central monitoring location and the local experts to include sending software/programs from the central monitoring location to the local experts to distribute software/programs as needed to conserve space requirements.

13. Claim 48 is rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,298,308 B1 to Reid et al. in view of USPN 6,445,969 B1 to Kenney et al. as applied to claims 32, 40-42 and 44 above, and further in view of USPN 5,291,416 to Hutchins.

Art Unit: 2121

As per claim 48, the Reid et al. or Kenney et al. references do not expressly disclose electronic documents for user selection of options are transmitted from the host computer to the client computer.

The Hutchins reference discloses

(see column 14 lines 7-25, "... machine tool operator downloads a machine tool part program ... interaction with local computer 10 via computer user interface 14 and communication with host computer 20 ... machine tool operator must select the desired machine part from those available at host computer 20 ... Upon selection ... host computer 20 transmits this machine tool part program to local computer 10 via computer network 60 ...")

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to further modify the communication between the central monitoring location and the local experts taught by the Reid et al. reference with the local computer run machine tool program taught by the Hutchins reference to include sending software/programs from the central monitoring location to the local experts.

One of ordinary skill in the art would have been motivated to further modify the communication between the central monitoring location and the local experts to

Art Unit: 2121

include sending software/programs from the central monitoring location to the local experts to distribute software/programs as needed to conserve space requirements.

14. Claim 45-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,298,308 B1 to Reid et al. in view of USPN 6,560,513 B2 to Krause et al.

As per claim 45, the Reid et al. reference does not expressly disclose electronic documents for user selection of options are transmitted from the host computer to the client computer.

The Krause et al. reference discloses

(see column 8 lines 4-11, "... teach pendant 112 acts as the client ... display the display page containing data received from a server ... The server may be the robot controller 102 ... the remote computer 116 ... request additional data to display ...")

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the communication between the central monitoring location and the local experts taught by the Reid et al. reference with

client/server interaction taught by the Krause et al. reference to include sending data to display from the central monitoring location to the local experts.

One of ordinary skill in the art would have been motivated to modify the communication between the central monitoring location and the local experts to include sending data to display from the central monitoring location to the local experts to distribute data as needed to conserve space requirements.

As per claim 46, the Krause et al. reference discloses the documents ("display page") comprise Internet pages (see column 7 lines 16-22, "HTML").

As per claim 47, the Krause et al. reference discloses the Internet pages comprise web pages (see column 7 lines 16-22, "web browser 726").

15. Claim 48-50 is rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,298,308 B1 to Reid et al. in view of USPN 6,445,969 B1 to Kenney et al. as applied to claims 32, 40-42 and 44 above, and further in view of USPN 6,560,513 B2 to Krause et al.

As per claim 48, the Reid et al. or Kenney et al. references do not expressly disclose electronic documents for user selection of options are transmitted from the host computer to the client computer.

Art Unit: 2121

The Krause et al. reference discloses

(see column 8 lines 4-11, "... teach pendant 112 acts as the client ... display the display page containing data received from a server ... The server may be the robot controller 102 ... the remote computer 116 ... request additional data to display ...")

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to further modify the communication between the central monitoring location and the local experts taught by the Reid et al. reference with client/server interaction taught by the Krause et al. reference to include sending data to display from the central monitoring location to the local experts.

One of ordinary skill in the art would have been motivated to further modify the communication between the central monitoring location and the local experts to include sending data to display from the central monitoring location to the local experts to distribute data as needed to conserve space requirements.

As per claim 49, the Krause et al. reference discloses the documents ("display page") comprise Internet pages (see column 7 lines 16-22, "HTML").

Art Unit: 2121

As per claim 50, the Krause et al. reference discloses the Internet pages comprise web pages (see column 7 lines 16-22, "web browser 726").

## Allowable Subject Matter

- 16. Claims 33-36, 53, 54, 57 and 63 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 17. The following is a statement of reasons for the indication of allowable subject matter:

As per claims 33 and 34, the prior art of record taken alone or in combination fail to teach the client computer comprises a unique identification means with respect to the host computer, via said unique identification means the host computer associates machine state data received from the client computer with its source.

As per claim 53, the prior art of record taken alone or in combination fail to teach receiving over the data communication link from the client computer a unique identification means associated with the client computer.

Art Unit: 2121

#### Conclusion

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following references are cited to further show the state of the art with respect to remote control in general:

USPN 6,799,195 B1 to Thibault et al.

USPN 6,556,956 B1 to Hunt

USPN 6,507,765 B1 to Hopkins et al.

USPN 6,026,348 to Hala

USPN 5,844,808 to Konsmo et al.

USPN 5,224,051 to Johnson

USPN 4,531,182 to Hyatt

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Crystal J. Barnes whose telephone number is 571.272.3679. The examiner can normally be reached on Monday-Friday alternate Mondays off.

Art Unit: 2121

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight can be reached on 571.272.3687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CJB

19 October 2004

Anthony Knight

Supervisory Patent Examiner

Group 3600